BookletChart™

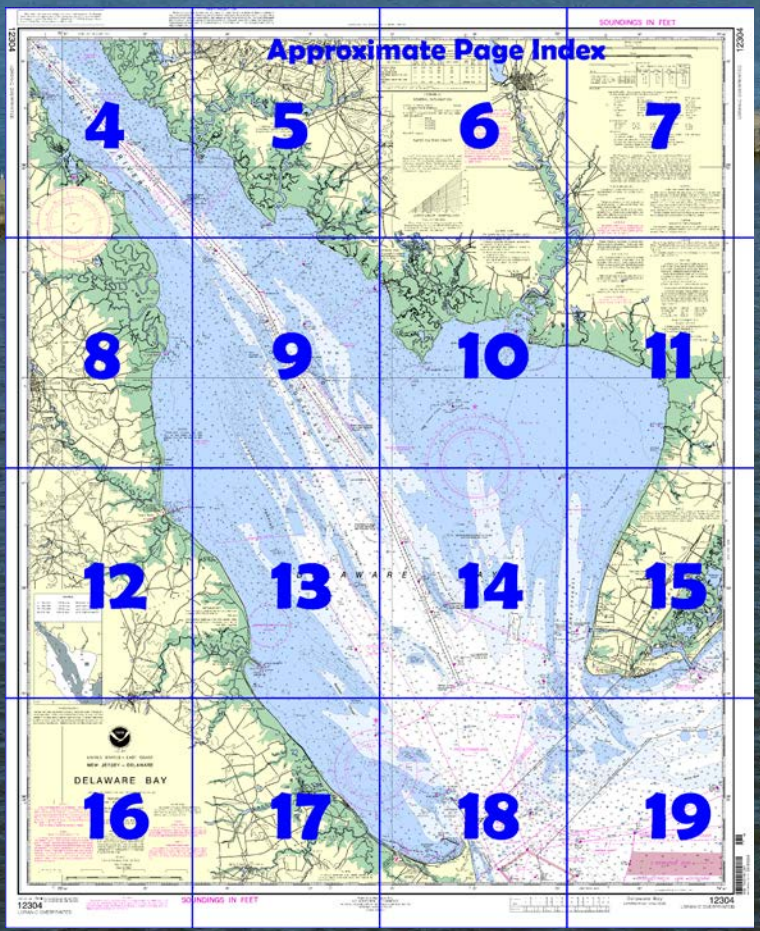
Delaware Bay

NOAA Chart 12304

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

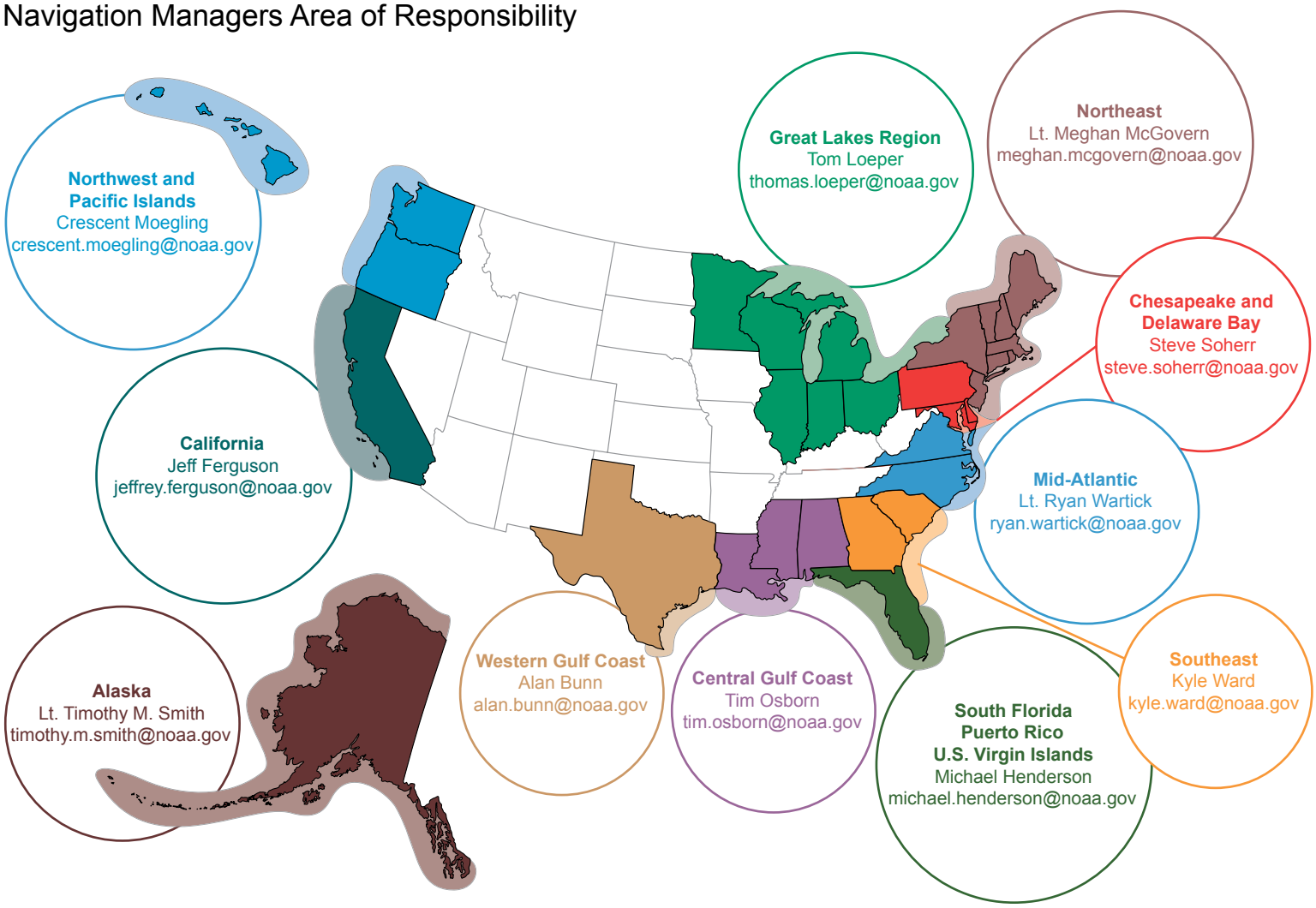
For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12304

(Selected Excerpts from Coast Pilot)
Delaware Bay and Delaware River form the boundary between the State of New Jersey on the east and the States of Delaware and Pennsylvania on the west. The bay is an expansion of the lower part of Delaware River; the arbitrary dividing line, 42 miles above the Delaware Capes, extends from Liston Point, Del., to Hope Creek, N.J. Deep-draft vessels use the Atlantic entrance, which is about 10 miles wide between Cape May on the northeast and Cape Henlopen on the southwest.
Mileages shown in this chapter, such as Mile 0.9E and Mile 12W, are the nautical miles above the **Delaware Capes** (or "the Capes"), referring to a line from Cape May Light to the tip of Cape Henlopen. The letters N, S, E, or W, following the numbers, denote by compass points the side of the river where each feature is located.
Cape May is the extensive peninsula on the northeast side of the entrance to Delaware Bay. **Cape May Light** (38°55'59"N., 74°57'37"W.), 165 feet above the water, is shown from a white tower with a red cupola and two white dwellings nearby on Cape May Point.
The shoals off Cape May are mixed clay and sand and have the consistency of hardpan; the ridges run in approximately the same directions as the currents. **Cape May Channel,** 1 mile southwest of the cape, is an unmarked passage between shoals, with depths from 2 to 4 feet on either side. The channel is seldom used, and then only by fishing vessels and pleasure craft; local knowledge is required for safe passage.
Lower River and Bay.–1. The maximum fresh water draft for river transit from sea to Delair, New Jersey is 40 feet.
2. All vessels arriving with a fresh water draft in excess of 37 feet are to transit during flood current only.
3. All vessels over Panamax size beam (106 ft) having a fresh water draft in excess of 35'–06" shall only transit during flood current.
4. Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 37 feet and up to 40 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.
5. The maximum salt-water draft for entrance into Delaware Bay and Big Stone Beach anchorage is 55 feet, as per federal regulation. Qualified offshore advisors with portable DGPS units are available upon request from the Pilots' Association for the Bay and River Delaware.
6. Safe Under-Keel Clearance (UKC) should be assured for all transits, taking into consideration the vessel's squat and variations of actual tidal levels due to high winds, barometric pressure, and other atmospheric conditions. Actual tidal heights for many points in the Delaware Bay and River can be determined on the NOAA PORTS web site at http://co-ops.nos.noaa.gov/dbports/dbports.html, or by calling 1-866-307-6787 (1-866-30-PORTS).
7. Actual tidal levels and currents will vary from predicted heights due to high winds, barometric pressure, and other atmospheric conditions. Actual tidal heights, currents, bridge air gaps, and other data can be determined for many points in the Delaware Bay and River on the NOAA PORTS web site at http://co-ops.nos.noaa.gov/dbports/dbports.html, or by calling 1-866-307-6787 (1-866-30-PORTS).
8. The U.S. Army Corps of Engineers periodically surveys the bottom conditions of the Delaware Bay and River main channel and anchorages, publishing the results of these surveys at http://www.nap.usace.army.mil/channel/list.htm.
Vessel Reporting.–It is recommended that vessels report their position and status to the Maritime Exchange over VHF-FM channel 14 in the following situations:
1. When anchoring.
2. When getting underway.
3. When passing through Marcus Hook.
4. When entering or exiting the C&D canal.
5. When making fast to the dock.
6. Tugs operating without a barge are exempt from this recommendation. Tugs with barges are requested to report to the Philadelphia Maritime Exchange when anchoring and leaving all anchorages.
It is important to stand by on VHF-FM channels 14 and 16 at all times. And AIS should always be on if the vessel is equipped with it.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Norfolk	Commander 5th CG District Norfolk, VA	(575) 398-6231

Navigation Managers Area of Responsibility

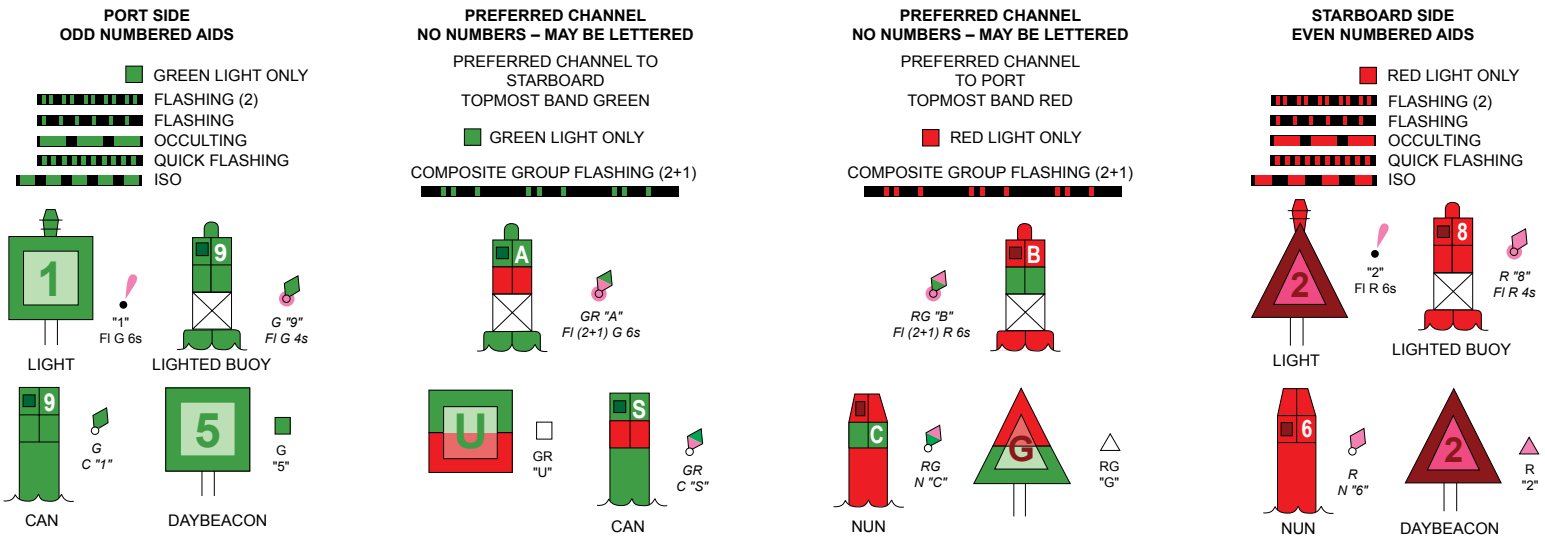


NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit *nauticalcharts.noaa.gov/service/navmanagers*

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*.
To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

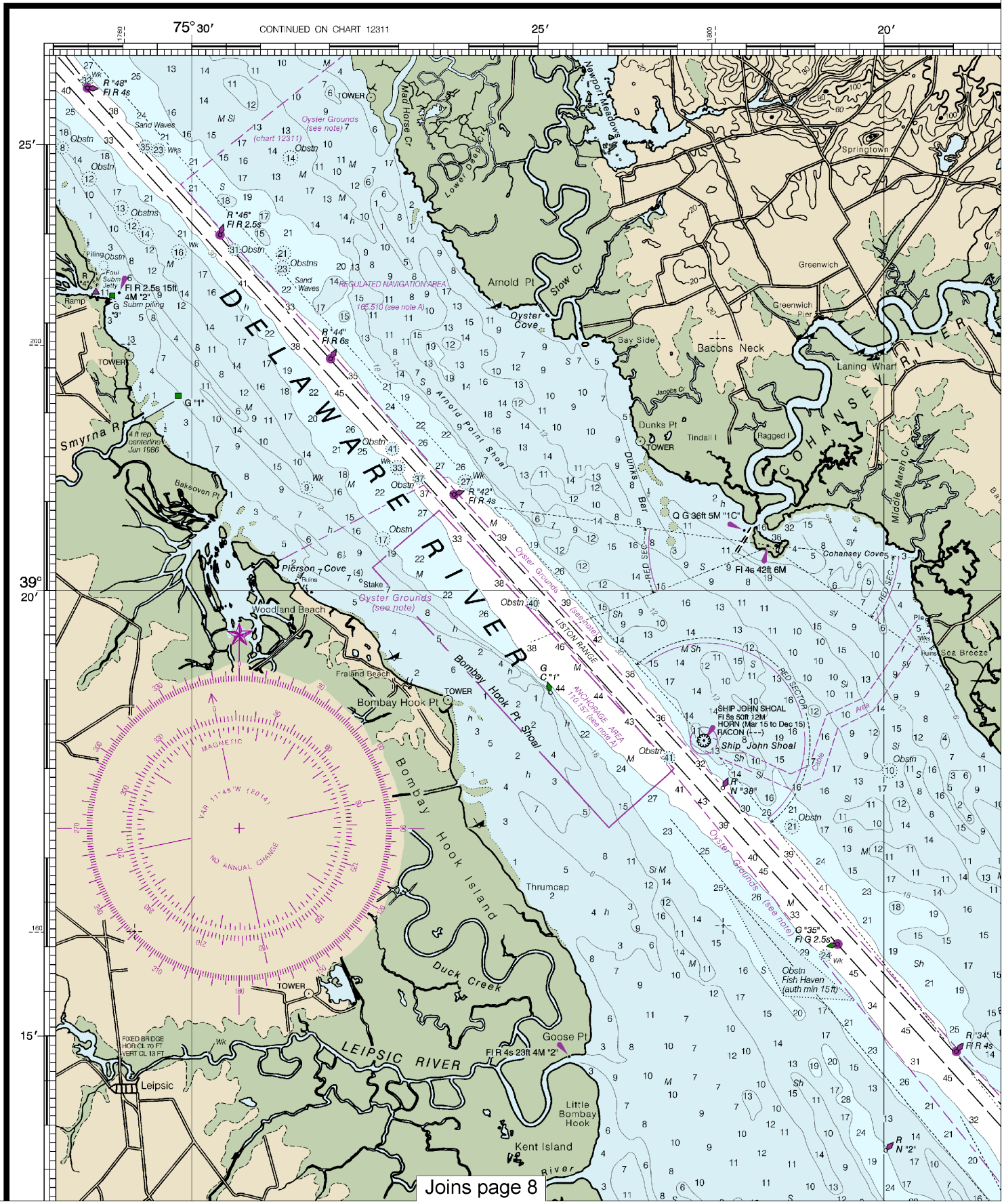
Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at *http://www.navcen.uscg.gov*

SOUNDINGS IN FEET



Printed at reduced scale. ~~SCALE 1:80,000~~

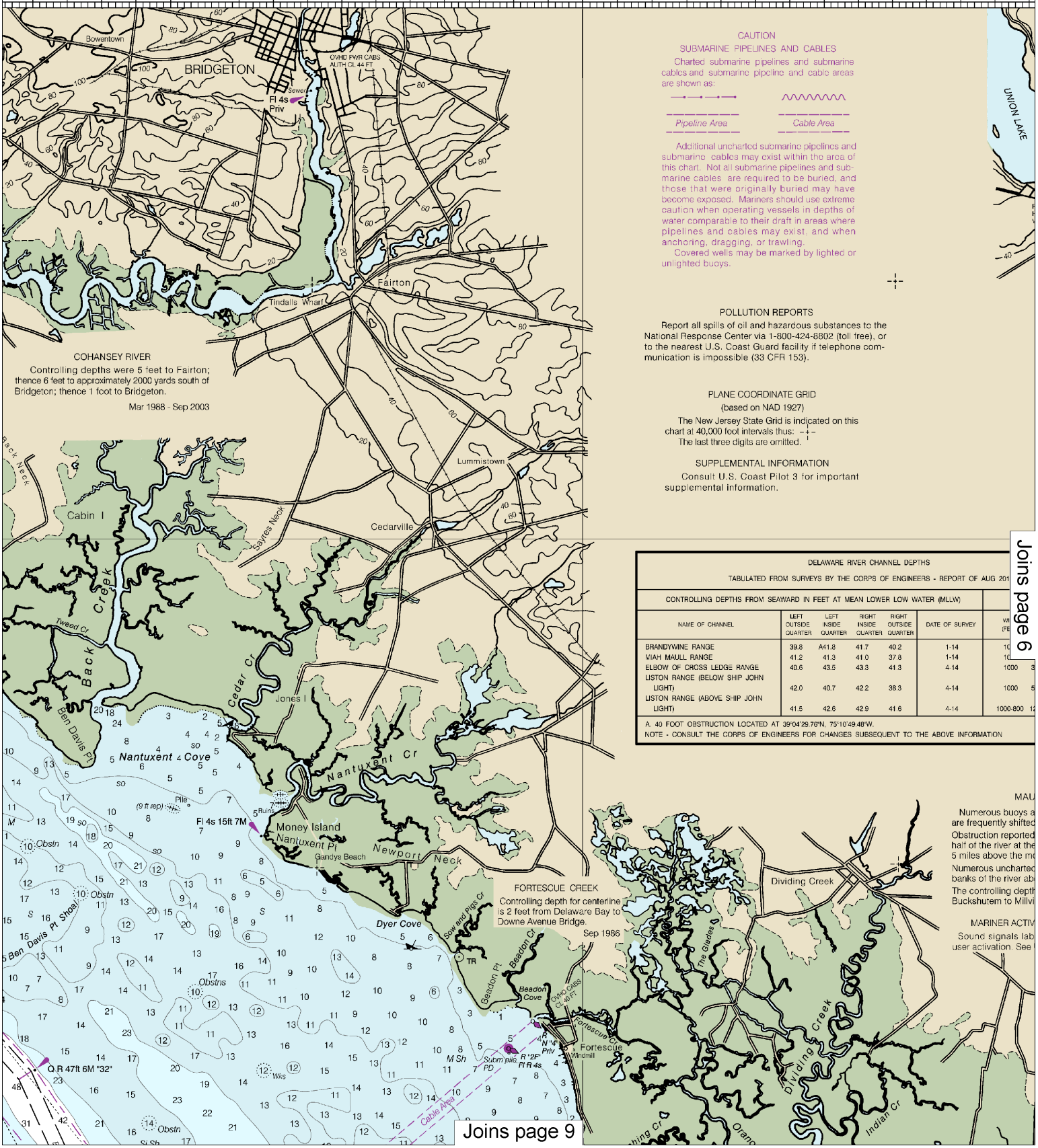
Nautical Miles: 1 0 1 2 3 4 5 6 7

Yards: 1000 0 2000 4000 6000 8000 10000

See Note on page 5.

Note: Chart grid lines are aligned with true north.

15′ 10′ 05′



CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

PLANE COORDINATE GRID

(based on NAD 1927)

The New Jersey State Grid is indicated on this chart at 40,000 foot intervals thus: –+– The last three digits are omitted.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

COHANSEY RIVER

Controlling depths were 5 feet to Fairton; thence 6 feet to approximately 2000 yards south of Bridgeton; thence 1 foot to Bridgeton.

Mar 1988 - Sep 2003

FORTESCUE CREEK

Controlling depth for centerline is 2 feet from Delaware Bay to Downe Avenue Bridge.

Sep 1986

DELAWARE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF AUG 201

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	W (FE
BRANDYWINE RANGE	39.8	A41.8	41.7	40.2	1-14	1(
MIAH MAULL RANGE	41.2	41.3	41.0	37.8	1-14	1(
ELBOW OF CROSS LEDGE RANGE	40.6	43.5	43.3	41.3	4-14	1000 3
LISTON RANGE (BELOW SHIP JOHN LIGHT)	42.0	40.7	42.2	38.3	4-14	1000 5
LISTON RANGE (ABOVE SHIP JOHN LIGHT)	41.5	42.6	42.9	41.6	4-14	1000-800 1

A. 40 FOOT OBSTRUCTION LOCATED AT 39°04'29.76"N, 75°10'49.48"W.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

MAU

Numerous buoys a are frequently shifted Obstruction reported half of the river at the 5 miles above the m Numerous uncharted banks of the river ab The controlling depth Buckshutem to Millvi

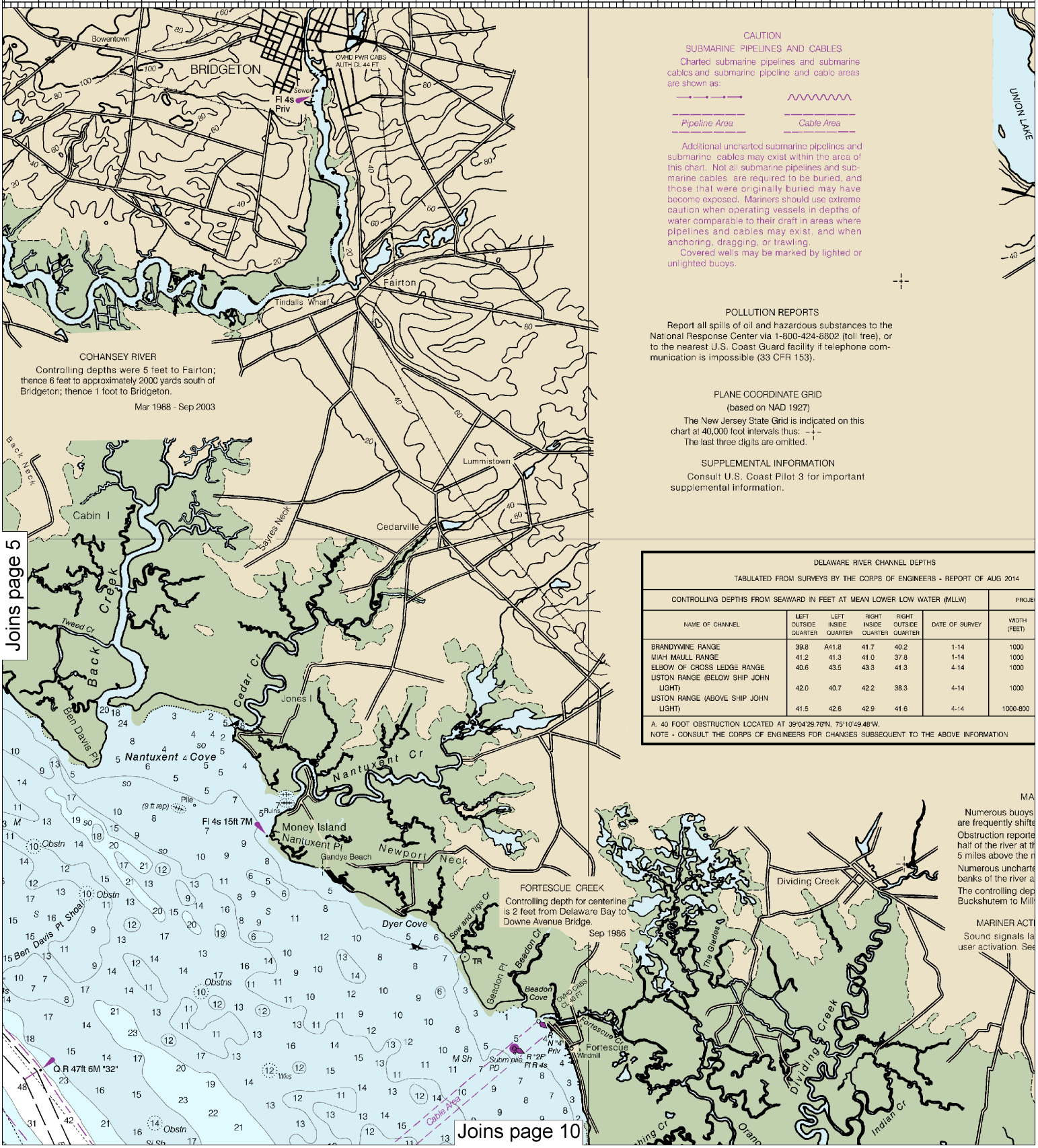
MARINER ACTIV

Sound signals lab user activation. See

Joins page 6

Joins page 9

15′ 10′ 05′



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Sep 1986

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CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJE
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)
BRANDYWINE RANGE	39.8	A41.8	41.7	40.2	1-14	1000
MIAH MAULL RANGE	41.2	41.3	41.0	37.8	1-14	1000
ELBOW OF CROSS LEDGE RANGE	40.6	43.5	43.3	41.3	4-14	1000
LISTON RANGE (BELOW SHIP JOHN LIGHT)	42.0	40.7	42.2	38.3	4-14	1000
LISTON RANGE (ABOVE SHIP JOHN LIGHT)	41.5	42.6	42.9	41.6	4-14	1000-800

A. 40 FOOT OBSTRUCTION LOCATED AT 39°04'29.76"N, 75°10'49.48"W.
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Printed at reduced scale. ~~SCALE 1:80,000~~ See Note on page 5.

Nautical Miles: 1 0 1 2 3 4 5 6 7

Yards: 1000 0 2000 4000 6000 8000 10000

Note: Chart grid lines are aligned with true north.

75° 55′ 74°50′

SCALE 1:80,000

Nautical Miles

1 ½ 0 1 2 3 4 5 6 7

Yards

1000 0 5000 10000

25′ 20′ 39° 20′ 15′

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Cape May Point	(38°57'N/74°58'W)	5.4	5.0	0.2
Breakwater Harbor	(38°47'N/75°07'W)	4.7	4.2	0.2
Murderkill River Entrance	(39°04'N/75°24'W)	5.7	5.3	0.1
Woodland Beach	(39°20'N/75°28'W)	6.4	6.1	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Aug 2014)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical
Al alternating
B black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — —

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: ⊛

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

OYSTER GROUNDS

CAUTION - Numerous stakes and obstructions exist within these areas.

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: — — — — —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

NOTE E

CAUTION

The controlling depth within the Five Fathom Bank inbound traffic lane is 40 feet. The Mariners Advisory Committee recommends that vessels with drafts of 35 feet or greater use the Delaware to Cape Henlopen inbound traffic lane.

The controlling depth within the Cape Henlopen to Five Fathom Bank outbound traffic lane is 43 feet.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be

Joins page 11

MAURICE RIVER

ys are not charted because they fted in position.

ted extending across the eastern the shipbuilding company about e mouth.

rted wrecks exist along the above Maurice town.

epth is reported to be 6 feet from illville in 1967.

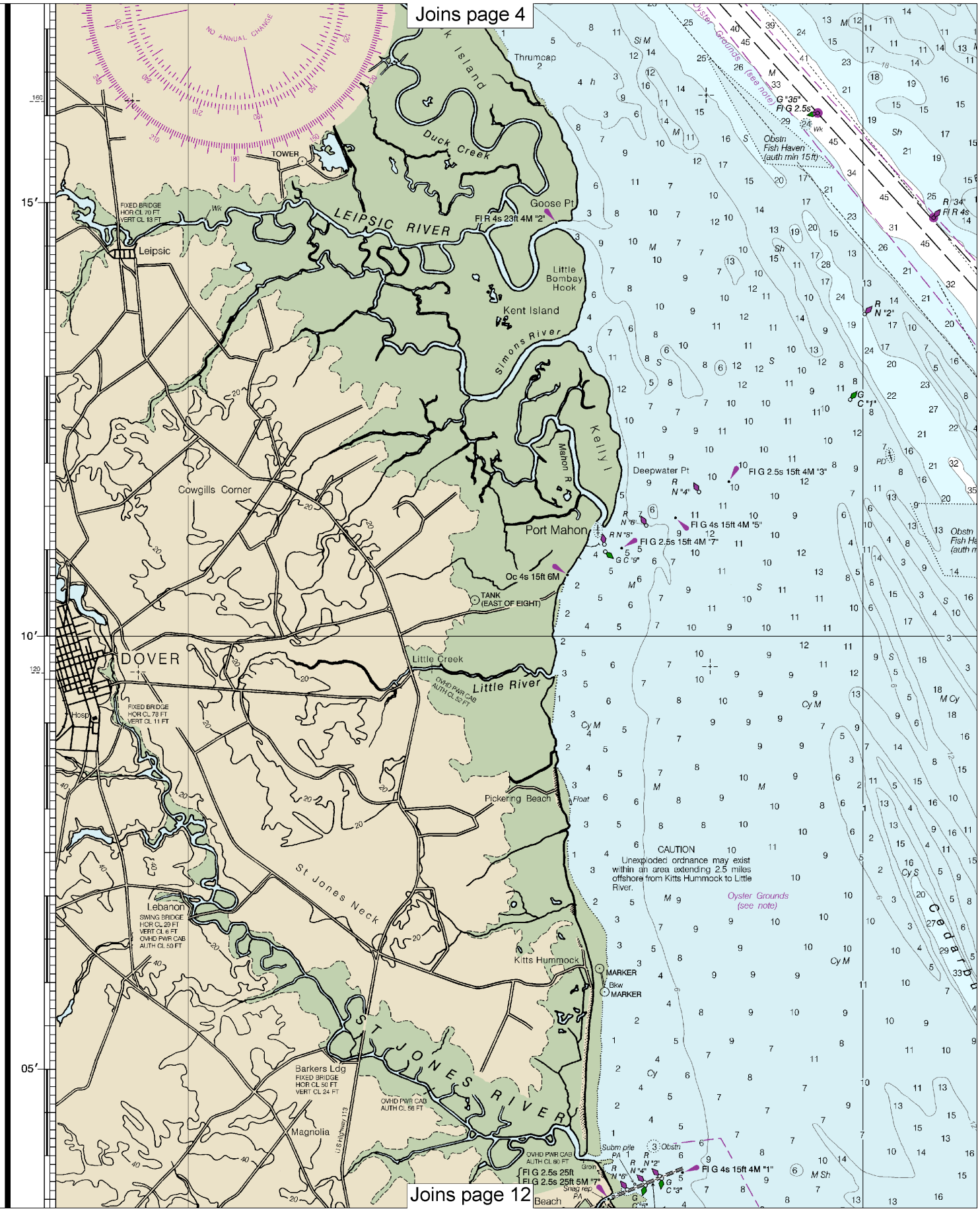
CTIVATED SOUND SIGNALS

labeled with (MRASS) require ee USCG Light List.

LENGTH (NAUT MILES)	DEPTH MLLW (FEET)
10.94	40
7.02	40
3.39	40
5.57	40
12.42	40

MILLVILLE
FIXED BRIDGE HOR CL 50 FT VERT CL 12 FT
FIXED BRIDGE HOR CL 50 FT VERT CL 4 FT
OVHD PWR CAB AUTH CL 67 FT
Pipeline Area
MAURICE RIVER
Menantico Creek
Laurel Lake
Buckshutem
Manumuskin River
Port Elizabeth
Bricksboro
FIXED BRIDGE HOR CL 91 FT VERT CL 25 FT
Mauricetown
SPIRE
OVHD PWR CABS AUTH CL 60 FT
Cable Area
Ruins
Dorchester
Dorchester Shipyard
Leesburg
Port Norris
Shellpile
Bivalve
Matts Landing
Maurice River
TANK

47th Ed., Oct. 2014. Last Correction: 11/14/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)
nauticalcharts.noaa.gov



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Nautical Miles

1 0 1 2 3 4 5 6 7

Yards

1000 0 2000 4000 6000 8000 10000

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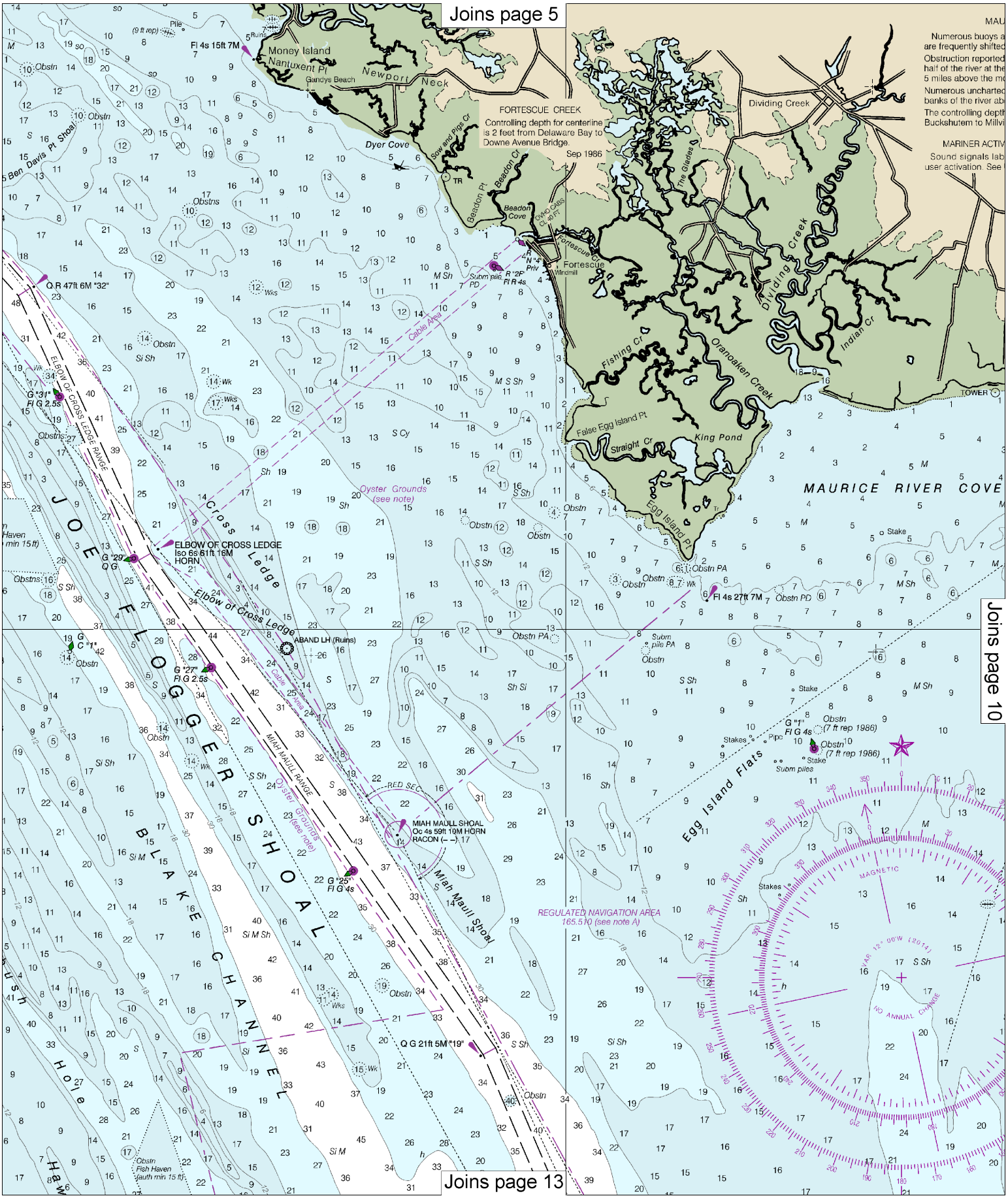
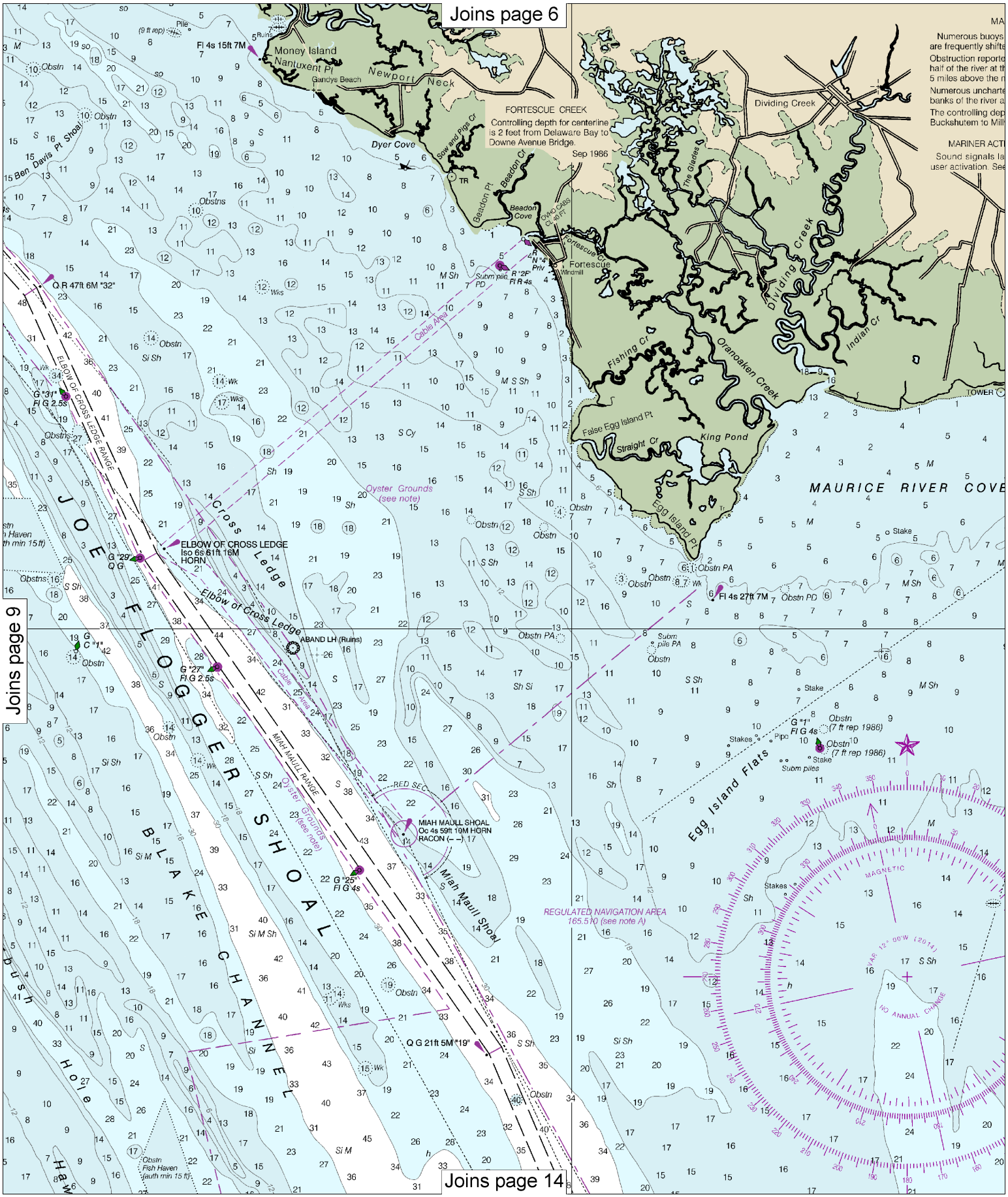

Joins page 5
Joins page 10
Joins page 13
Money Island
Nantuxent Pt
Gandys Beach
Newport Neck
Dyer Cove
FORTESCUE CREEK
Controlling depth for centerline is 2 feet from Delaware Bay to Downe Avenue Bridge.
Sep 1986
Dividing Creek
Beadon Pt
Beadon Cove
Fortescue Cr
Fortescue
Windmill
Fishing Cr
Oranoaken Creek
Indian Cr
False Egg Island Pt
Straight Cr
King Pond
Egg Island Pt
MAURICE RIVER COVE
Cross Ledge
Elbow of Cross Ledge
ELBOW OF CROSS LEDGE
Iso 6s 61ft 16M
HORN
ABAND LH (Ruins)
Oyster Grounds (see note)
Cable Area
JOE FLOGGER SHOAL
BLAKE CHANNEL
MIAH MAULL RANGE
MIAH MAULL SHOAL
MIAH MAULL SHOAL
Oc 4s 59ft 10M HORN
RACON (– – –) 17
RED SEC
Egg Island Flats
REGULATED NAVIGATION AREA
165.510 (see note A)
Fl 4s 15ft 7M
Q R 47ft 6M "32"
Fl 4s 27ft 7M
Q G 21ft 5M "19"
Fl G 4s
Fl G 2.5s
Fish Haven
(auth min 15 ft)
TOWER
MAGNETIC
VAR 12° 00'W (2014)
NO ANNUAL CHANGE



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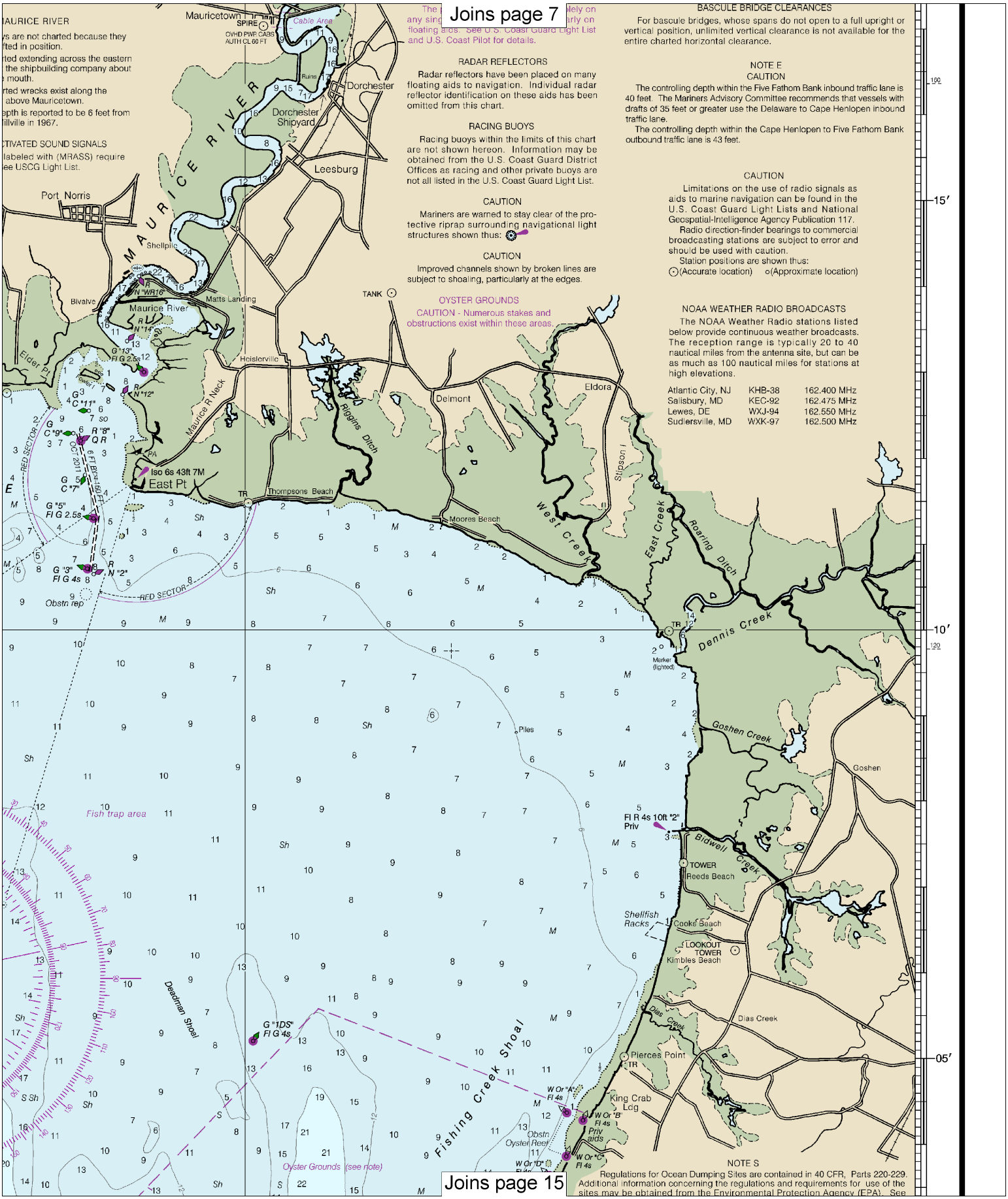
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Dorchester
Dorchester Shipyard
Leesburg
MAURICE RIVER
Port Norris
Shellpile
Bivalve
Matts Landing
Maurice River
Elder Pt
Hoisterville
Maurice R Neck
TANK
Delmont
Eldora
Riggins Ditch
Stipson I
West Creek
East Creek
Roaring Ditch
Dennis Creek
Iso 6s 43ft 7M
East Pt
TR
Thompsons Beach
Moores Beach
RED SECTOR
Obstn rep
Fish trap area
Deadman Shoal
Fishing Creek Shoal
Oyster Grounds (see note)
Piles
Goshen Creek
Goshen
Fl R 4s 10ft "2"
Priv
Bidwell Creek
TOWER
Reeds Beach
Shellfish Racks
Cooks Beach
LOOKOUT TOWER
Kimbles Beach
Dias Creek
Pierces Point
King Crab Lcg
Obstn
Oyster Reef
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Joins page 15
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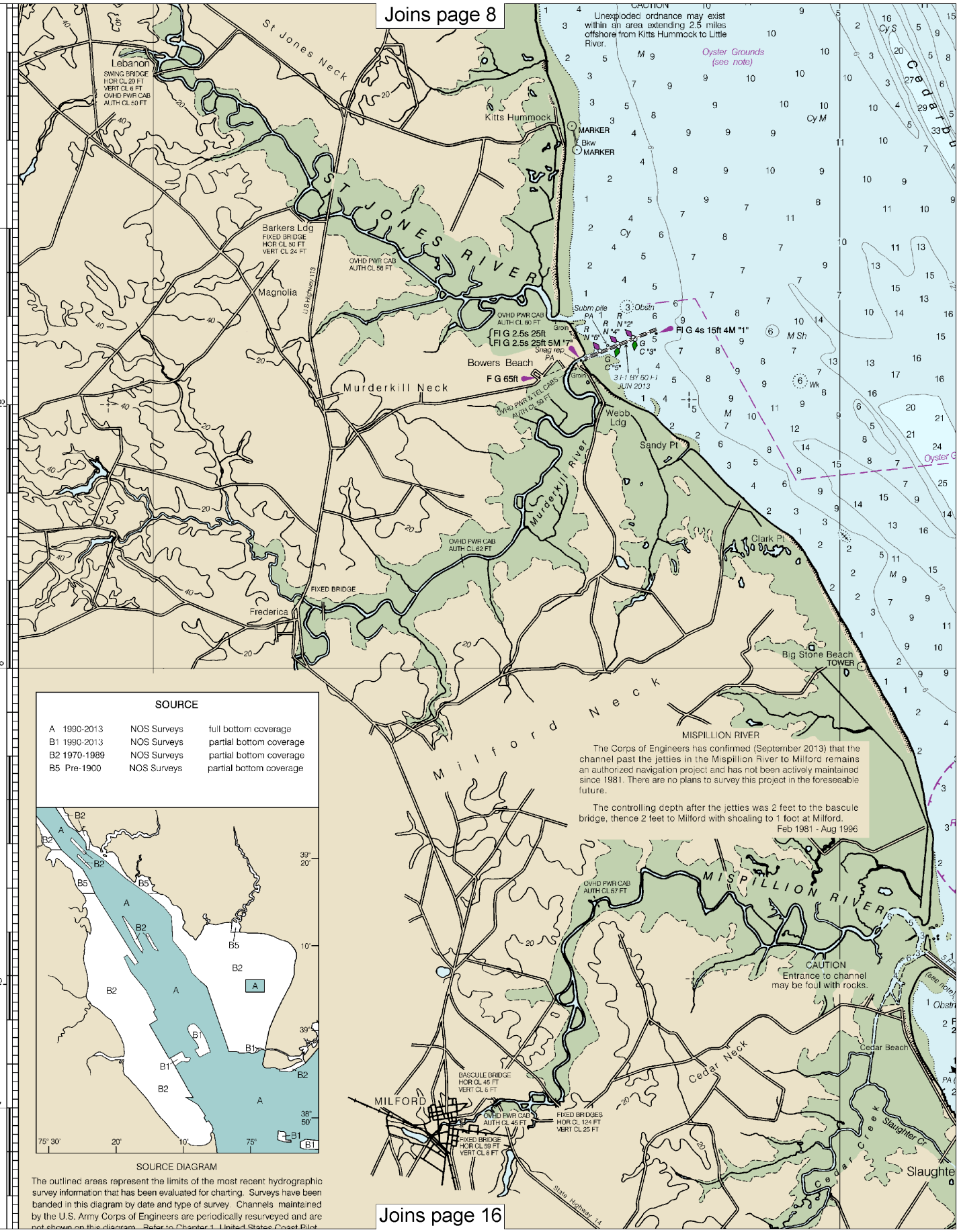
The controlling depth within the Cape Henlopen to Five Fathom Bank outbound traffic lane is 43 feet.
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.
Atlantic City, NJ KHB-38 162.400 MHz
Salisbury, MD KEC-92 162.475 MHz
Lewes, DE WXJ-94 162.550 MHz
Sudlersville, MD WXK-97 162.500 MHz
NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See
15′
10′
05′

Joins page 8



SOURCE

A 1990-2013	NOS Surveys	full bottom coverage
B1 1990-2013	NOS Surveys	partial bottom coverage
B2 1970-1989	NOS Surveys	partial bottom coverage
B5 Pre-1900	NOS Surveys	partial bottom coverage

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot

Joins page 16

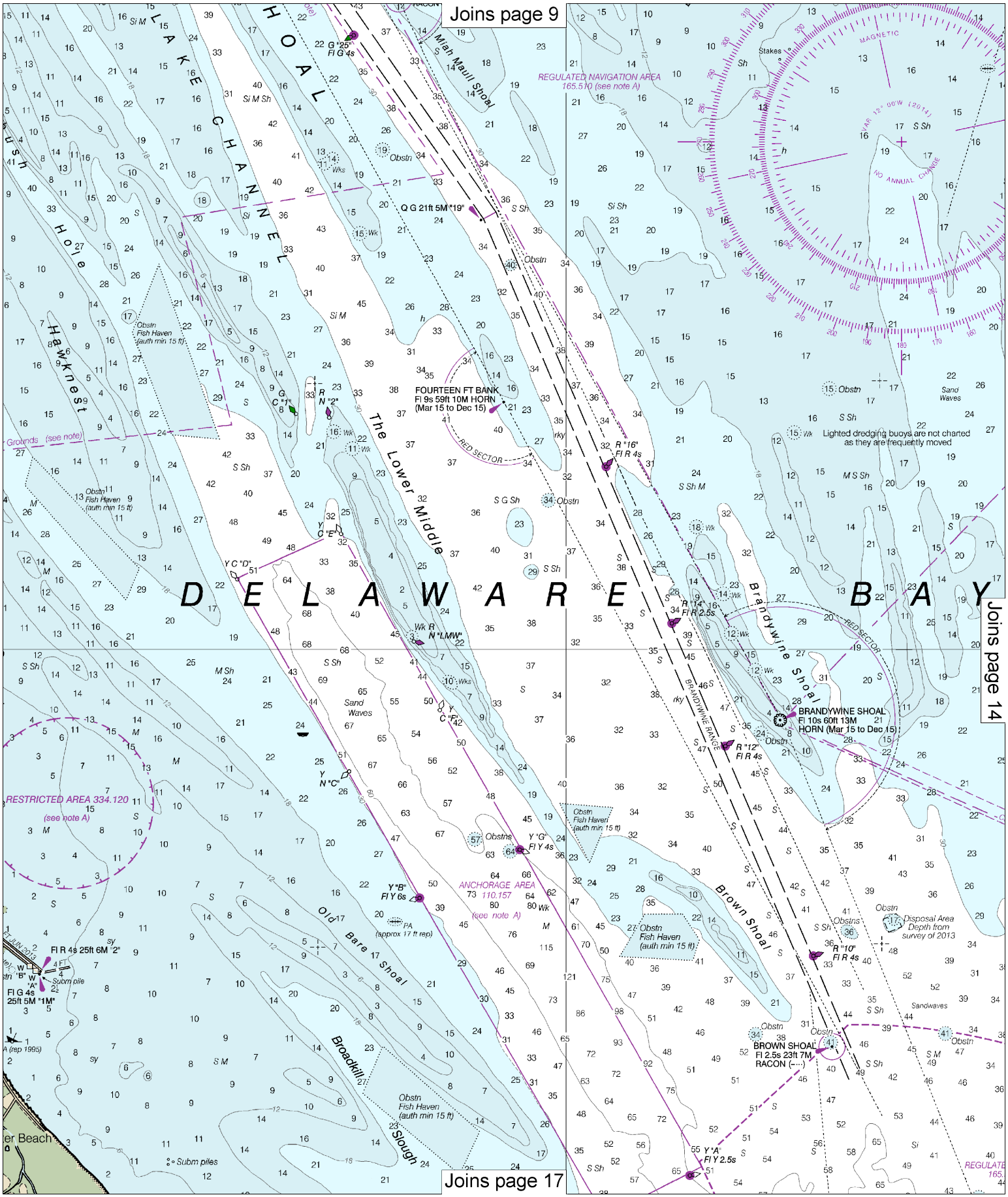
Note: Chart grid lines are aligned with true north.

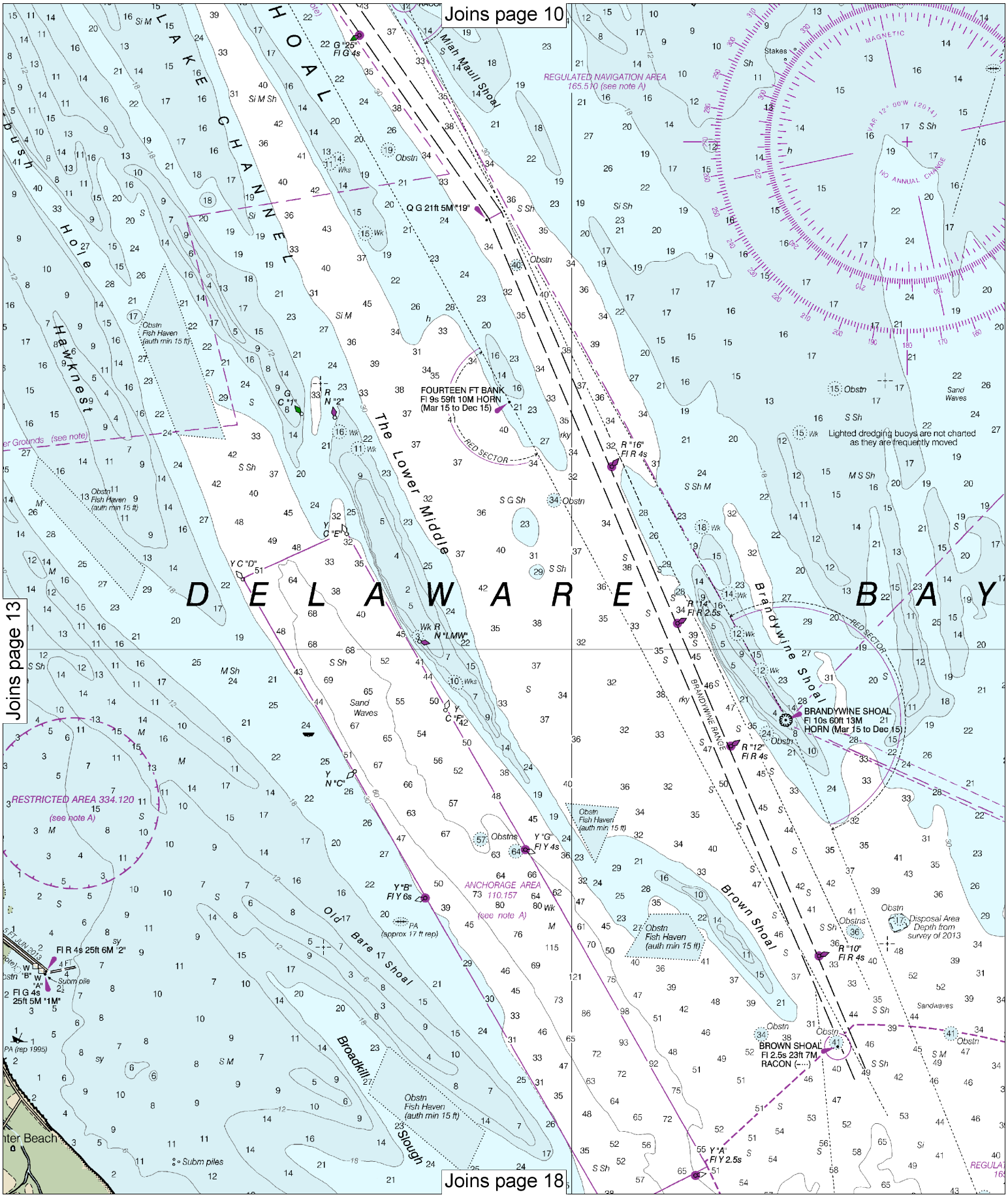
Printed at reduced scale. ~~SCALE 1:80,000~~

See Note on page 5.

Nautical Miles
1 0 1 2 3 4 5 6 7

Yards
1000 0 2000 4000 6000 8000 10000


Joins page 9
Joins page 14
Joins page 17
DELAWARE BAY
LAKE CHANNEL
HOAL
Hawknest
The Lower Middle
Milah Maull Shoal
Brandywine Shoal
Brown Shoal
Old Bare Shoal
Broadkill Slough
REGULATED NAVIGATION AREA 165.510 (see note A)
FOURTEEN FT BANK Fl 9s 59ft 10M HORN (Mar 15 to Dec 15)
BRANDYWINE SHOAL Fl 10s 60ft 13M HORN (Mar 15 to Dec 15)
BROWN SHOAL Fl 2.5s 23ft 7M RACON (---)
RESTRICTED AREA 334.120 (see note A)
ANCHORAGE AREA 73 110.157 80 (see note A)
Lighted dredging buoys are not charted as they are frequently moved
Disposal Area Depth from survey of 2013
Fl R 4s 25ft 6M "2"
Fl G 4s 25ft 5M "1M"
Q G 21ft 5M "19"
Fl G 4s
Y "B" Fl Y 6s
Y "G" Fl Y 4s
Y "A" Fl Y 2.5s
R "16" Fl R 4s
R "14" Fl R 2.5s
R "12" Fl R 4s
R "10" Fl R 4s
RED SECTOR
BRANDYWINE RANGE
Obstn
Fish Haven (auth min 15 ft)
Sand Waves
Subm piles
Subm pile
PA (approx 17 ft rep)
Grounds (see note)
MAGNETIC
VAR 12° 00'W (2014)
NO ANNUAL CHANGE



14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:80,000~~

Nautical Miles

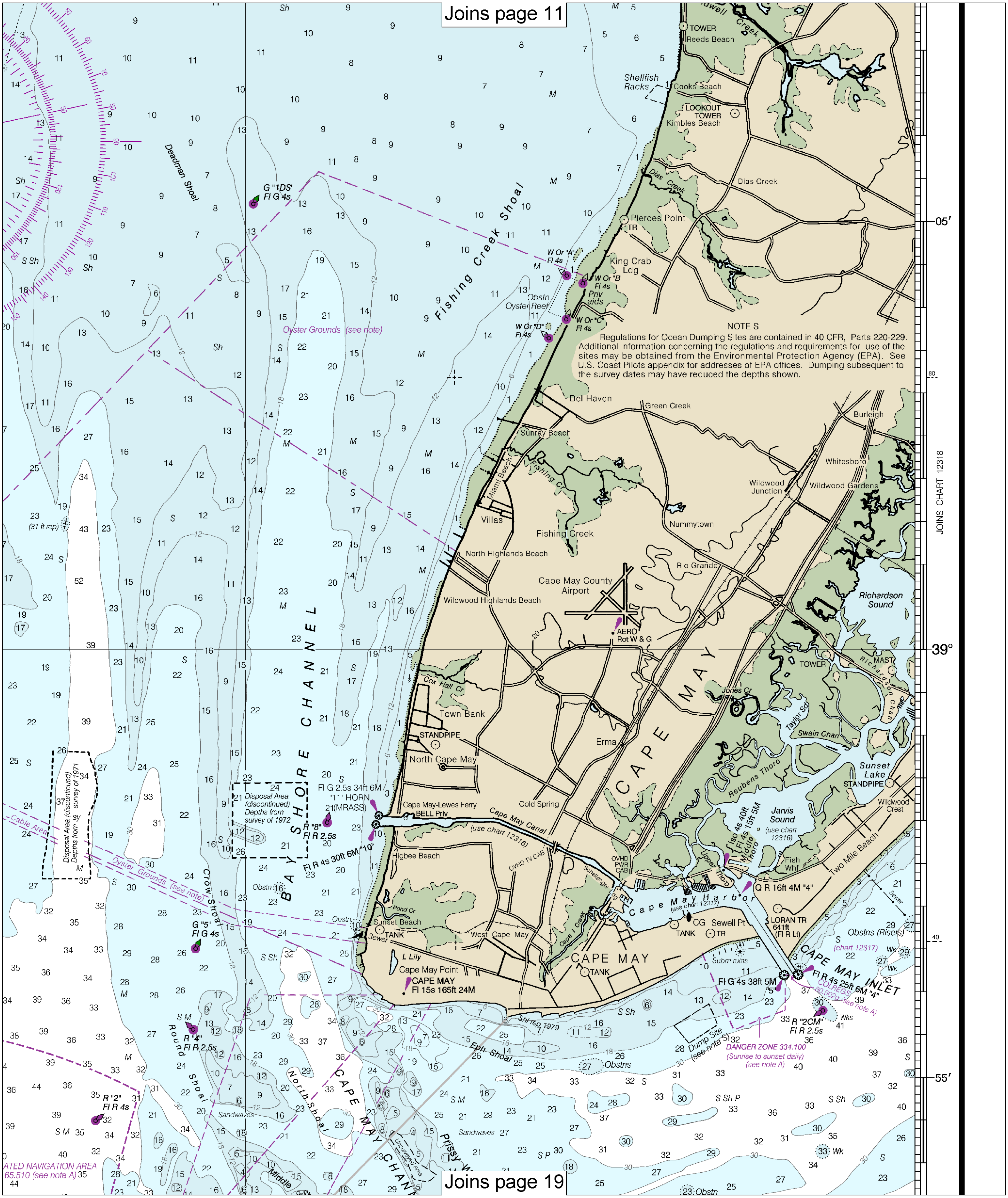
1 0 1 2 3 4 5 6 7

Yards

1000 0 2000 4000 6000 8000 10000

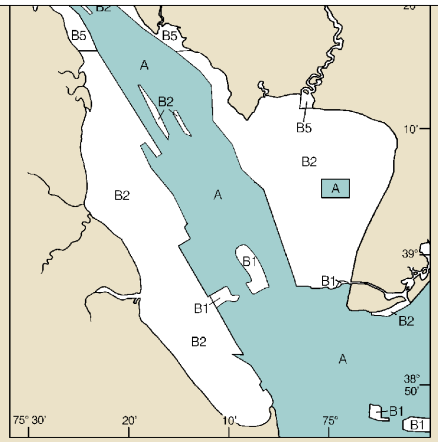
See Note on page 5.

Joins page 11



Joins page 19

Joins page 12



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES – EAST COAST

NEW JERSEY – DELAWARE

DELAWARE BAY

Additional information can be obtained at nauticalcharts.noaa.gov.

Mercator Projection
Scale 1:80,000 at Lat. 39°06′

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Philadelphia, Pennsylvania.

Refer to charted regulation section numbers.

NOTE C

TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to Delaware Bay, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones use extreme caution.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.407" northward and 1.347" eastward to agree with this chart.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

NOTE B

DANGER AREA

Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any other similar type of operation because of residual danger from mines on the bottom.

NOTE D

PRECAUTIONARY AREA

Traffic within the PRECAUTIONARY AREA may consist of cruising pilots and vessels making the transition between operating in Delaware Bay and one of the traffic lanes. Mariners are advised to exercise extreme care in navigating within this area.

SCALE 1:80,000
Nautical Miles
1 ½ 0 1 2 3 4 5 6 7

Yards
1000 0 5000 10000

MISPILLION RIVER
CAUTION
Entrance to channel may be foul with rocks.
OVHD PWR CAB AUTH CL 57 FT
DASCULE BRIDGE HOR CL 45 FT VERT CL 5 FT
MILFORD
OVHD PWR CAB AUTH CL 45 FT
FIXED BRIDGES HOR CL 124 FT VERT CL 25 FT
FIXED BRIDGE HOR CL 59 FT VERT CL 8 FT
Cedar Neck
Cedar Beach
Slaughter Cr
Slaughter Neck
State Highway 14
MILTON
TANK
OVH
38° 50′ 00″
1790
75° 30′
25′
1800
20′

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discrepancies about this chart at http://www.nauticalcharts.noaa.gov/staff/co

12304

47th Ed., Oct. 2014. Last Correction: 11/14/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)

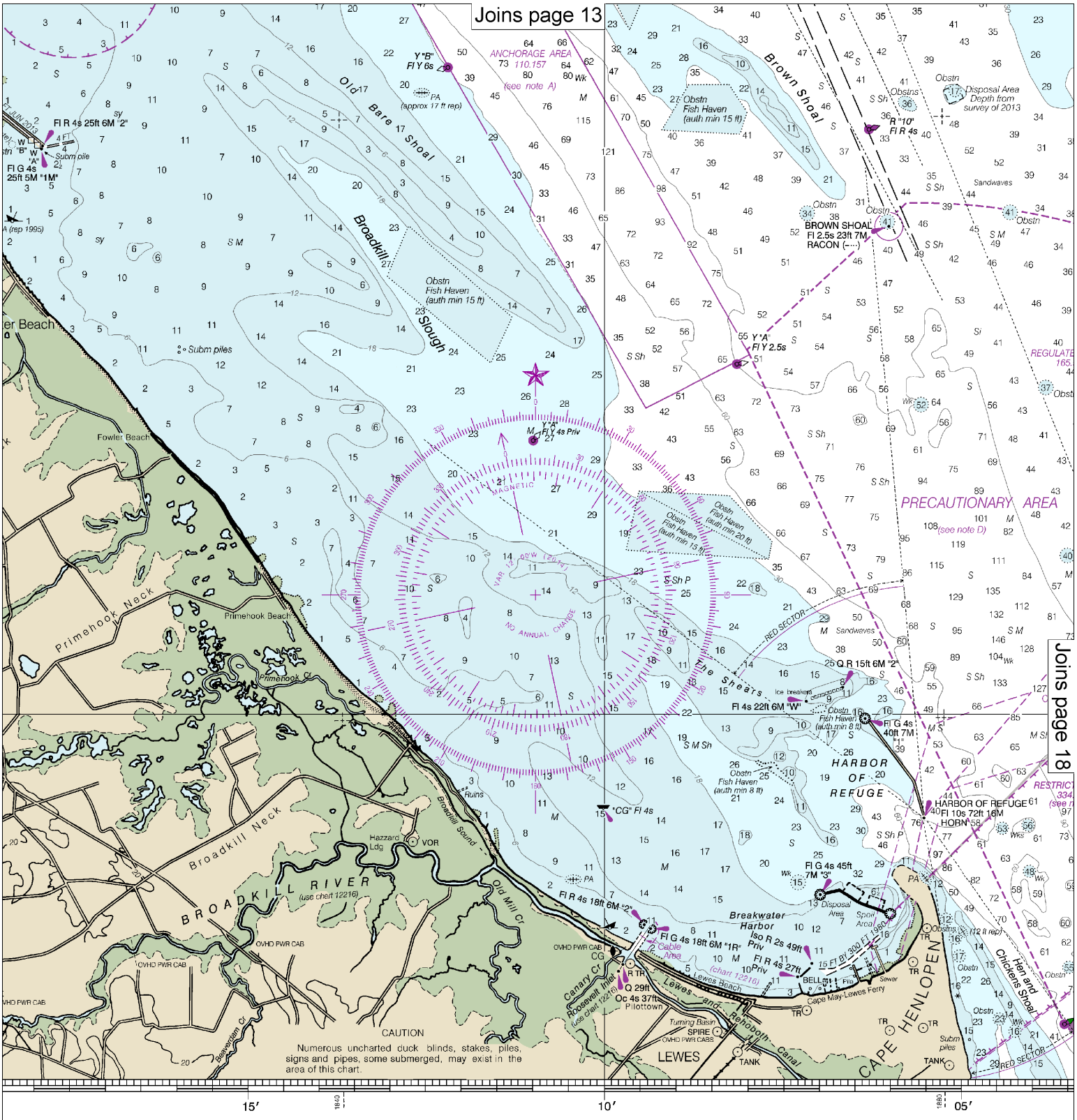
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:80,000~~

See Note on page 5.

Nautical Miles
1 0 1 2 3 4 5 6 7

Yards
1000 0 2000 4000 6000 8000 10000



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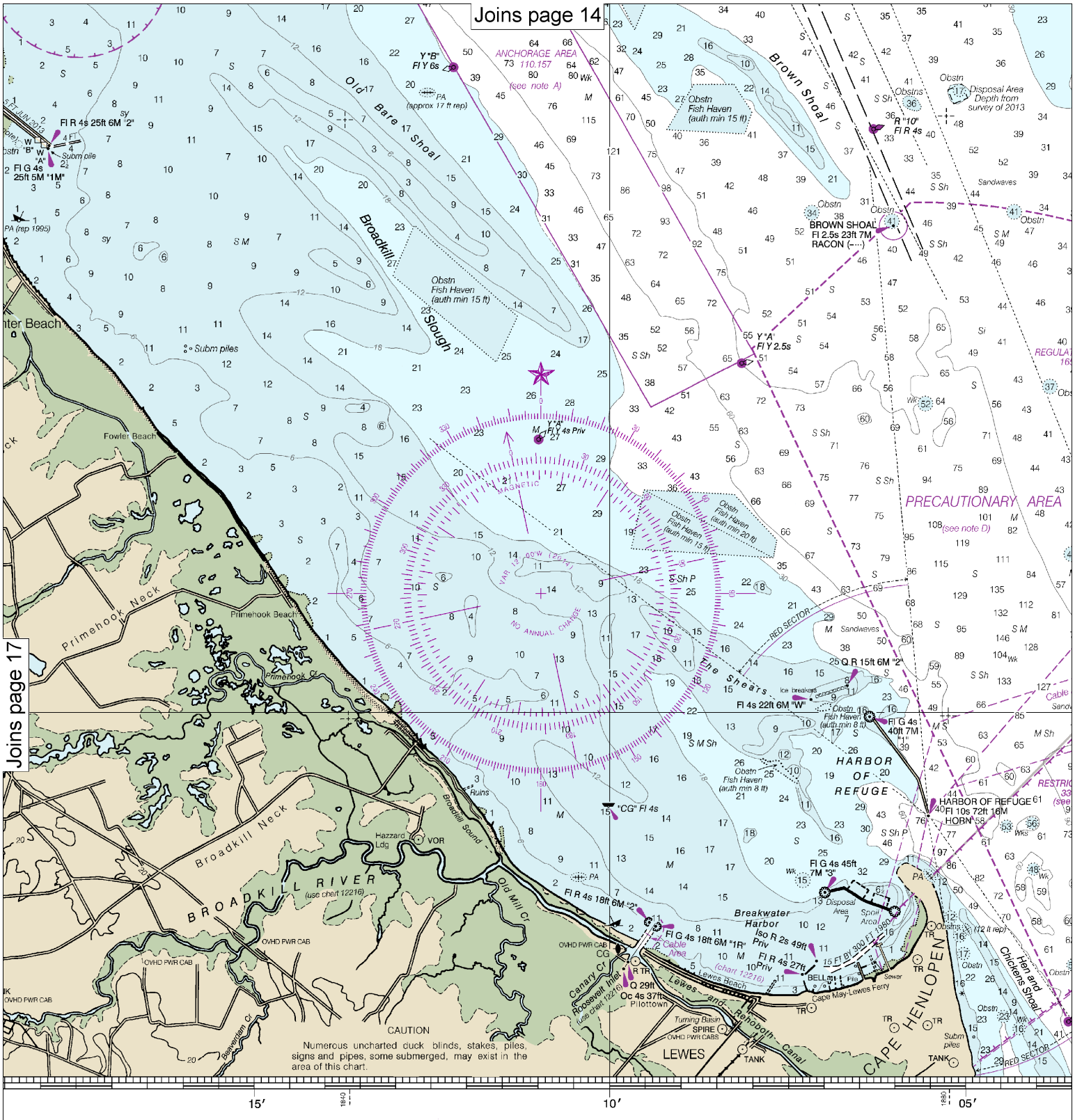
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

SOUNDINGS IN FEET



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COAST SURVEY

SOUNDINGS IN FEET

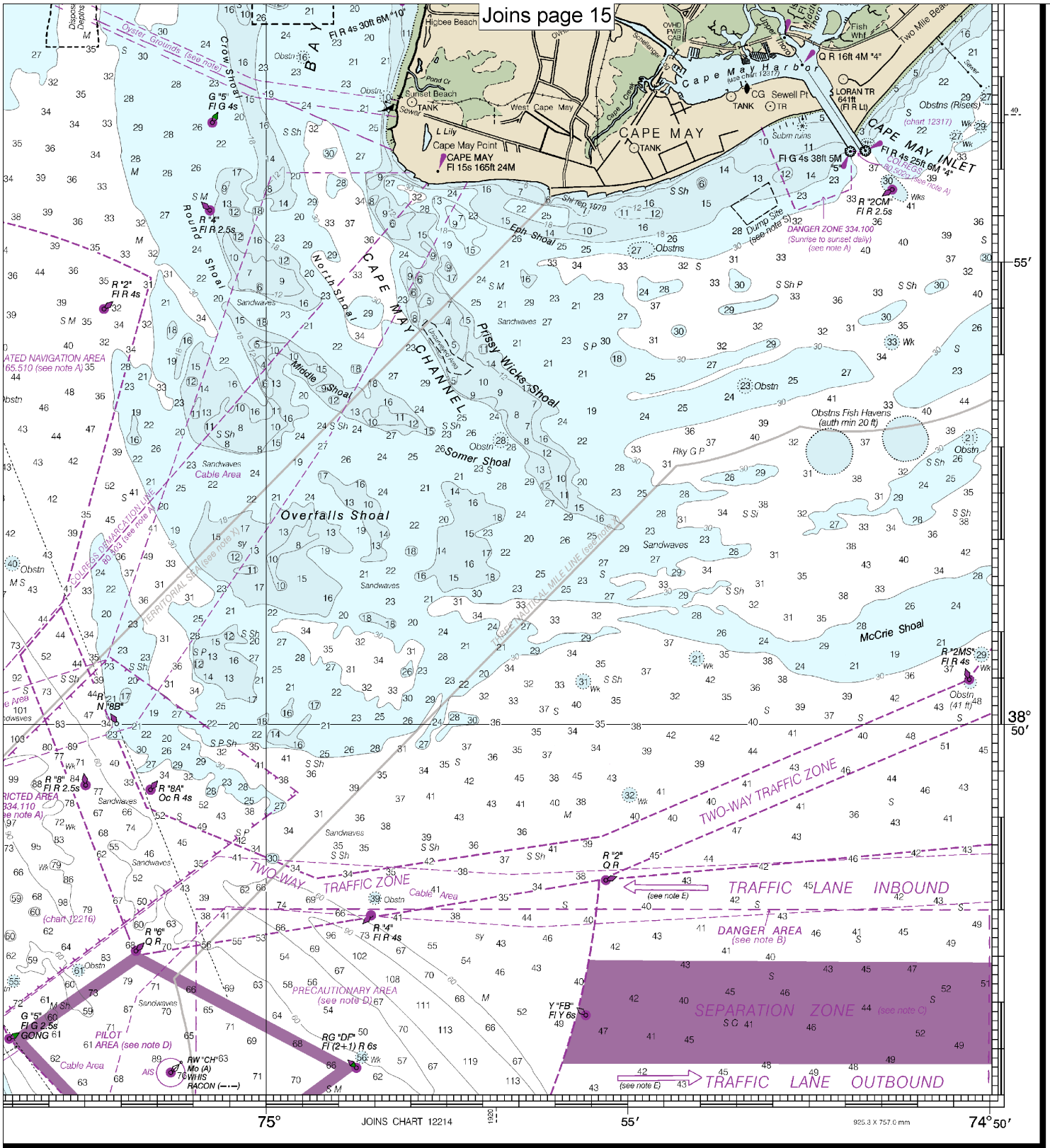
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:80,000~~

Nautical Miles
1 0 1 2 3 4 5 6 7

Yards
1000 0 2000 4000 6000 8000 10000

See Note on page 5.



FATHOMS	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
FEET	6 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102
METERS	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Delaware Bay

SOUNDINGS IN FEET - SCALE 1:80,000

12304

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

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National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
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